



***ForeThought* for the PC
Release Notes**

**Software Version 4.1.6 (Windows NT and 95)
and 4.1.1 (NetWare)**

MANU0251-01 - Rev. A - 12/97

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1.0 General Description of Software Release

These release notes highlight the features that have been added to or have changed in the *ForeThought* 4.1.6 release, for Windows NT and 95, and the *ForeThought* 4.1.1 release for NetWare.

Refer to the manual included with this release for comprehensive information on system requirements and driver installation.

2.0 System Requirements

The *ForeThought* 4.1.6 adapter software requires that *ForeThought* 4.0.x or greater software also run on a switch, PowerHub 7000, SunOS workstation, or Solaris workstation in your network, in order to accommodate the LAN Emulation Services. Please contact FORE Systems for information on upgrading your switch software if necessary.

3.0 Improvements

3.1 Common

- The *ForeThought* drivers' reliability has been improved for all operating systems and platforms.
- The *ForeThought* drivers now allow configuration of MTU size.
- The *ForeThought* drivers now support UNI 3.0 and UNI 3.1 signalling, and automatic UNI configuration via ILMI.
- The *ForeThought* drivers no longer encounter a hanging condition on certain Pentium II machines upon booting.

3.2 NetWare (*ForeThought* 4.1.1)

- The FORE ATM HSM (Hardware Specific Module) driver is now available, supporting the Novell LAN Emulation Client (LEC) with the PCA-200EPC adapter. The Novell LEC is an ATM Forum compliant software stack that supports Ethernet and Token Ring LAN Emulation.

3.3 Windows NT and Windows 95

- The *ForeThought* Windows 95 and NT drivers now support discovery of the LECS address via ILMI. The driver will first attempt to retrieve the LECS address via ILMI. If that does not work, it will try the manually specified LECS address, if there is one. If not, it will try the well-known address and then PVC (0,17).

The Novell LEC used in NetWare does not currently support LECS discovery via ILMI.

- The FORE ATM Service Provider is now available for use with WinSock 2.
- The driver now supports Token Ring emulated LANs.
- The driver now supports Classical IP (RFC 1577).
- The InFOREmation Center utility, an expanded and improved version of the FORE ATM Statistics utility, allows you to view information about the driver and its current connections.
- The *ForeThought* drivers now support ILMI address registration for multiple adapters in a host.
- The driver implements improvements in installation and initialization under Windows 95 OSR2.

4.0 Known Issues or Concerns

4.1 Common

- As indicated in the manual, be sure to install the FORE adapters in a Bus Master slot.
- Depending on the BIOS version you are using, the FORE adapters might not run on the IBM 320. If you encounter this problem with an LE or PCA adapter, please install the latest BIOS for this machine, dated 6/19/96 or later. This BIOS is available from IBM's web site as the file 320BIOSE.EXE, where it is listed as:

PC Server PCI/EISA BIOS 16T3B (313191 bytes, 07-15-96)

After expanding 320biose.exe the BIOSLEVL file should contain:

BIOS Code version: M54Pe_16T3B dated: 06/19/96

- When running the drivers on an HP Vectra, turn off the Ethernet controller.
- Alpha-based workstations using the Digital Semiconductor PC164 Motherboard with a SCSI based controller board along with a PCA-200EPC adapter may encounter booting difficulties. Contact DEC for the latest firmware upgrade to resolve the problem.
- An interoperability problem exists with the PCA-200EPC adapter in a DEC Alpha 500 that may result in a BIOS conflict with a SCSI controller. FTP to DEC at the following address to download the latest firmware (as500_v6_4.exe) to resolve the problem.

ftp://ftp.digital.com/pub/Digital/Alpha/firmware/v4.0/alpha500

- These drivers will not inter-operate with release 1.x of PC adapter software from FORE.
- No SPANS support.
- No FORE IP support.
- No FORE LAN Emulation 0.4 support.

4.2 Windows NT and Windows 95

- When using IPX/SPX, the Auto-detect frame type may not always work. If it does not, set the frame type manually.
- Sporadically Windows 95 halts when the driver is removed and the system is rebooted. Power cycle the system to proceed.
- In some circumstances, the Windows 95 plug and play feature does not discover the adapter card and does not automatically install the *ForeRunner* ATM driver. This most often occurs in two situations:
 - At some previous time, when the adapter card was discovered by Windows 95 at boot-up and the New Hardware Found dialog box appeared, the Do not install a driver (Windows will not prompt you again) option was chosen.
 - Another adapter had been previously installed in the machine.

In this case, check for an unknown (question-mark) entry for the previously-installed adapter in the Device Manager tab of the System Properties control panel. You can delete the unknown entry using the procedure in the Windows 95 installation chapter of the manual, in the section "Installing the ATM Driver Manually." After deleting the unknown entry and re-booting, Windows 95 will discover the adapter card and you can install the driver via plug-and-play, as described in the manual.

- Due to binding constraints in Windows NT, some machines can support only 12 Token-Ring ELANs, rather than a total of 16. If your machine is unable to load 16 Token-Ring ELANs, reduce the number of ELANs that the machine is attempting to join to 12.
- When using a FORE adapter in a Windows NT machine to route between a Token Ring ELAN and a legacy Token Ring LAN, note that the legacy LAN clients must set their default gateway to the address Windows NT machine that is routing.
- Because the FORE Statistics utility has been renamed InFOREmation Center, any Task Bar links or shortcuts created to an earlier version of the utility will not be updated when the *ForeThought* 4.1 drivers and software are installed.
- Windows NT on MIPS and PowerPC platforms are no longer supported. Intel and DEC Alpha platforms are still supported.
- When using these drivers with the PCA-200EPC adapter in some laptop computers and docking stations, you may receive the error "docking station failed request" when undocking from the docking station. You must shutdown and reboot the system.
- In the InFOREmation Center utility, depending on connection status, connection information may appear in yellow. If the yellow text is not readable on your machine, please adjust your screen resolution to improve clarity and contrast.
- Due to a known problem FORE is investigating, when using the Automatic ELAN selection, the Failover mechanism does not work.
- Note that when you configure an ELAN driver, the LECS configuration applies to all ELAN drivers. All ELAN drivers must use the same LECS, whether you use the well-known address, PVC (0,17), or manually enter the address.
- Due to limits with Windows NT Services for Macintosh, you are limited to a combined total of eight ELAN and IP Over ATM drivers when using Windows NT Services for Macintosh.

4.3 FORE WinSock2 ATM Service Provider

This section lists the known issues for the FORE WinSock2 ATM Service Provider. For a full description of the FORE ATM Service Providers, refer to Appendix F of the *ForeRunner 200E/LE Adapter User's Manual*, available on the *ForeRunner 4.1.6* PC software CD as the PDF file 41PC.PDF.

- Note that you must use the FORE adapter drivers included with the FORE WinSock2 ATM Service Provider in order to successfully use the service provider.
- Due to a known problem under investigation by FORE, you cannot have two PMP leaf applications running on the same host. When two leaves are running on the same host, the second leaf will never complete a connection to the root.
- Due to a problem in the Microsoft WinSock2 SDK version 1.6, the `SETUP.EXE` utility included with the FORE Service and Name Provider is unable to upgrade the `FORENAME.DLL` file. To successfully upgrade, remove the existing service provider using the `SETUP.EXE` utility, reboot the machine, and run `SETUP.EXE` to install the new version. This ensures that the `FORENAME.DLL` file is removed and replaced with the new version.
- Multiple adapters are not supported. The FORE ATM Service Provider supports only one adapter.
- Limited rate-shaping is supported on the PCA-200EPC adapter. Full CBR is supported on the *ForeRunnerLE* adapters.
- VPI's other than zero are not supported. The FORE ATM Service Provider supports only a VPI of zero.

For Windows NT users:

You must use WinSock2 SDK 1.6. You must replace the `WS2ATM.H` file included with the SDK 1.6 with the file provided in the `WINSOCK2\INCLUDE` folder. The three files needed from the SDK 1.6 distribution are the `WINSOCK2.H`, `WS2_32.LIB`, and the `WS2ATM.H`. Only the `WS2ATM.H` file must be replaced.

For Windows 95 users:

You must use WinSock2 SDK 2.0.

5.0 Contacting Technical Support

In the USA, you can contact FORE Systems' Technical Support by any one of four methods:

1. If you have access to the Internet, you may contact FORE Systems' Technical Support via e-mail at the following address:

support@fore.com

2. You may FAX your questions to "support" at:

412-742-7900 (BEFORE February 1, 1998)

724-742-7900 (AFTER February 1, 1998)

3. You may send questions, via US Mail, to the following address:

**FORE Systems, Inc.
1000 FORE Drive
Warrendale, PA 15086-7502**

4. You may telephone your questions to "support" at:

1-800-671-FORE

If you cannot dial an 800 number, please use:

1-412-635-3700 (BEFORE February 1, 1998)

1-724-635-3700 (AFTER February 1, 1998)

Technical support for non-U.S.A. customers should be handled through your local distributor.

No matter which method is used for technical support, please be prepared to provide the serial number(s) of the product(s) and as much information as possible describing your problem or question.

